

REMARKS

In response to the Office Action dated May 16, 2006 (hereinafter, the "Action"), Applicant respectfully requests reconsideration based on the following remarks.

A review of the claims indicates that:

Claims 1-22, and 28-35 were previously pending.

Claims 1, 7, 11, 12, 16-22, and 35 have been amended.

Claims 23-27 were previously canceled.

Claims 9, 10, 13, and 14 have been canceled.

Claims 1-8, 11, 12, 15-22, and 28-35 are currently pending in this application, with claims 1, 11, 17, 22, and 35 being independent.

Applicant respectfully submits that the claims as presented are in condition for allowance.

Objection to the Drawings

The Office objects to the drawings because the drawings contain corrected handwritten letters that are not well defined and clearly legible. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

Applicant submits all six pages of drawings have been redrafted to comply with 37 CFR 1.121(d). Applicant submits the corrections made to the drawings overcome the objection.

1 **Double Patenting Rejection**

2 The Office rejects claims 1, 7, 9, 10, 11-14, 17- 19, and 22 on the ground of
3 nonstatutory obviousness-type double patenting as being unpatentable over claims
4 1, 2, 3, 4, and 5 of U.S. Patent No. 6,873,628. The Office states the filing of a
5 terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used
6 to overcome an actual or provisional rejection based on a nonstatutory double
7 patenting ground.

8 Without conceding the propriety of the stated rejections, and solely to
9 advance the prosecution of this matter, the Applicant has canceled claims 9, 10,
10 13, and 14, and submits a terminal disclaimer for claims 1, 7, 11, 12, 17, 18, 19,
11 **and 22** of the instant application will be filed to overcome the nonstatutory double
12 patenting rejection.

13
14 **Rejections under 35 U.S.C. §102(e)**

15 The Office rejects claims 1, 2, 7, 8, 9, 11, 12, 15, 16, and 29-34 under 35
16 U.S.C. §102(e) as being anticipated by U.S. Patent 6,636,505 to Wang et al.,
17 (hereinafter, "Wang"). These rejections are respectfully traversed.

18
19 **Claim 1**

20 Turning first to **independent Claim 1**, without conceding the propriety of
21 the stated rejection, and without conceding that Wang provides the teaching for
22 which it was cited in the Action, the Applicant has amended claim 1 as indicated
23 above. For convenience of discussion, the Applicant reproduces here claim 1 as it
24 would stand after entry of the above revisions:
25

1 “A system to optimize resource planning for digital subscriber line
2 (DSL) services, comprising:

3 a network management system (NMS) in communication
4 with a DSL network; and

5 a computing application, said computing application operating on
6 said network management system capable of allocating, tracking, and
7 managing deterministic resource configuration variables used to create
8 virtual connections on said DSL network;

9 wherein the NMS uses the deterministic configuration variables to
10 reanimate hung virtual connections; and

11 wherein the NMS communicates information indicative of said hung
12 virtual connections to the DSL network such that the DSL network can
13 reanimate the hung virtual connections, the NMS calculating the
14 deterministic variables using the computing application to ascertain the
15 connection positions of the virtual connections on the DSL network, the
16 connection positions ascertainable due to assigned values for unique
17 deterministic variable combinations that identify each established virtual
18 connection.”

19
20 The Applicant submits that the above revisions to claim 1 are **fully**
21 **supported under 35 U.S.C. § 112, 1st paragraph**, at least by page 4, lines 1-18,
22 of the Applicant’s Specification.

1 The Wang patent pertains generally to a method for the service
2 provisioning of a broadband modem. More specifically, Wang pertains to a
3 method for users to acquire broadband access without having to personally
4 configure virtual circuits during the service provisioning process (Wang, Col. 5,
5 lines 51-53 and Col. 6, lines 1-3). Wang discloses a method for automatic service
6 provisioning for broadband access which utilizes default virtual path identifiers
7 (VPI) and virtual circuit identifiers (VCI) (Wang, Col. 6, lines 13-15 and Col. 6,
8 lines 44).

9 As such, Wang does not disclose every element of Applicant's amended
10 claim 1. For example, Wang does not show or disclose "...the NMS calculating
11 the deterministic variables using the computing application to ascertain the
12 connection positions of the virtual connections on the DSL network, the
13 connection positions ascertainable due to assigned values for unique deterministic
14 variable combinations that identify each established virtual connection," as in
15 Applicant's claim 1 after entry of the above revisions. Specifically, Wang does
16 not show or disclose calculating deterministic variables using a computing
17 application and assigned values for deterministic variables according to
18 connection position, as in Applicant's amended claim 1. Instead, Wang discloses
19 a service provisioning process (Wang, Col. 5, lines 37-55) that uses "default
20 VPI/VCI" in the transmission of provisioning data (Wang, Col. 6, lines 13-15 and
21 Col. 6, lines 44). The use of "default VPI/VCI" does not disclose
22 "calculating...deterministic variables using the computing application" where
23 "...unique deterministic variable combinations...identify each established virtual
24 connection," as in Applicant's claim 1; rather the term "default" pertains to an
25

1 arbitrary and undetermined amount, standard, or value that is not in use and is
2 available at a given time.

3 Because the Wang patent does not show or disclose every element of the
4 system of Applicant's claim 1, Applicant respectfully submits that Wang does not
5 support a §102 rejection of claim 1. The Applicant thus requests reconsideration
6 and withdrawal of the §102 rejection of claim 1.

7
8 **Claims 2, 7, 8, 9, 29, 30, and 31**

9 Claim 9 has been canceled and therefore the rejection of this claim is now
10 moot.

11 Claims 2, 7, 8, 29, 30, and 31 depend directly or indirectly from claim 1.
12 For at least the reasons set forth above with respect to claim 1, Applicant submits
13 that dependent claims 2, 7, 8, 29, 30, and 31 are also allowable and are not
14 anticipated by Wang. Claims 2, 7, 8, 29, 30, and 31 depend from claim 1, and
15 therefore, the comments directed above to claim 1 apply equally to these
16 dependent claims, as well as for the additional features recited in these claims.

17
18 **Claim 11**

19 Turning next to **independent Claim 11**, without conceding the propriety of
20 the stated rejection, and without conceding that Wang provides the teaching for
21 which it was cited in the Action, the Applicant has amended claim 11 as indicated
22 above. For convenience of discussion, the Applicant reproduces here claim 11 as it
23 would stand after entry of the above revisions:

1 "A method to optimize resources of DSL network providing DSL
2 services comprising:

3 (a) calculating, tracking, and storing configuration variables
4 used in a deterministic provisioning of virtual connections on the DSL
5 network;

6 (b) communicating the configuration variables to said DSL
7 network to create said virtual connections; and

8 (c) calculating a virtual circuit identifier (VCI) value, said
9 VCI value being calculated using a plurality of DSL configuration data
10 comprising any of connection position information, port information, and
11 sequence position information, and wherein calculating said virtual circuit
12 identifier (VCI) value further comprises the act of reverse engineering
13 resource allocations using said VCI value to ascertain the configuration
14 values of said DSL network components.

15
16 Applicant submits that claim 11 is not anticipated under 35 U.S.C. §102(e) by
17 the Wang reference for similar reasons as explained for claim 1. Specifically,
18 Wang does not show or disclose "...calculating, tracking, and storing
19 configuration variables used in a deterministic provisioning of virtual connections
20 on the DSL network...." and "calculating a virtual circuit identifier (VCI) value,
21 said VCI value being calculated using a plurality of DSL configuration data
22 comprising any of connection position information, port information, and
23 sequence position information..." as in Applicant's amended claim 11.
24
25

1 Because the Wang reference does not show or disclose each element of
2 Applicant's claim 11, Applicant respectfully suggests that Wang does not anticipate
3 claim 11. Thus, Applicant respectfully submits that claim 11 is allowable over Wang.
4

5 **Claims 12, 15, 16, 32, 33, and 34**

6 Claims 12, 15, 16, 32, 33, and 34 depend directly or indirectly from claim
7 11. For at least the reasons set forth above with respect to claim 11, Applicant
8 submits that dependent claims 12, 15, 16, 32, 33, and 34 are also allowable and are
9 not anticipated by Wang. Claims 12, 15, 16, 32, 33, and 34 depend from claim 11,
10 and therefore, the comments directed above to claim 11 apply equally to these
11 dependent claims, as well as for the additional features recited in these claims.
12

13 **Rejections under 35 U.S.C. §103(a)**

14 The Office rejects claims 3-6, 17, and 21 under 35 U.S.C. §103(a) as being
15 unpatentable over Wang. The Applicant respectfully traverses these rejections.
16

17 **Claims 3- 6**

18 Claims 3 and 6 depend directly or indirectly from independent claim 1.
19 Therefore, the comments directed above to claim 1 regarding the Office's 35
20 U.S.C. §102(e) rejection apply equally to claims 3-6 as well as for the additional
21 features recited in these dependent claims.

22 For at least these reasons set forth with respect to amended claim 1,
23 Applicant submits that dependent claims 3-6 are also not obvious over Wang.
24
25

1 Claims 3-6 depend from claim 1, and therefore, these claims should be allowable
2 for the reasons stated above with respect to claim 1.

3
4
5 **Claim 17**

6 Turning next to **independent Claim 17**, without conceding the propriety of
7 the stated rejection, and without conceding that Wang provides the teaching for
8 which it was cited in the Action, Applicant reproduces here claim 17:

9
10 “In a DSL network comprising a network management
11 system (NMS), an element management system (EMS), at least one
12 remote access multiplexer (RAM), and at least one central office
13 digital subscriber line access multiplexer, (CO DSLAM), a method
14 to provision resources on said DSL network comprising:

15 calculating deterministic configuration variables by said
16 NMS; and

17 communicating said calculated deterministic configuration
18 variables to said DSL network by said NMS using said EMS, said
19 EMS being communicatively coupled to said RAM and
20 CODSLAM.”

21
22 Applicant submits the Wang reference does not teach or suggest every
23 element of Applicant’s claim 17, for the same reasons as described above for
24 claim 1. In particular, Wang does not teach or suggest “...calculating
25 deterministic configuration variables by said NMS...” and “...communicating said

1 calculated deterministic configuration variables to said DSL network by said
2 NMS..." as in Applicant's claim 17. Specifically, the Wang reference does not
3 teach or suggest "calculating deterministic configuration variables" so that
4 variables are ascertainable by calculation and can be traced in situations such as
5 hung or halted provisioning processes, but instead discloses "using default
6 VPI/VCI" variables in the service provisioning process (Wang, Col. 6, lines 13-15
7 and Col. 6, lines 44).

8 Because the Wang reference fails to teach or suggest every element of
9 Applicant's claim 17, the references fail to support an obviousness rejection of this
10 claim under 35 USC §103(a). For at least the reasons just discussed, Applicant
11 submits that claim 17 is patentable over Wang.

12 13 **Claim 21**

14 Claim 21 depends directly from independent claim 17. Therefore, the
15 comments directed above to claim 17 apply equally to claim 21 as well as for the
16 additional features recited in this dependent claim.

17 For at least these reasons set forth with respect to amended claim 17,
18 Applicant submits that dependent claim 21 is also not obvious over Wang. Claim
19 21 depends from claim 17, and therefore, this claim should be allowable for the
20 reasons stated above with respect to claim 17.

1 **Claim 35**

2 The Office objects to claim 35 as being dependent upon a rejected base
3 claim, but would be allowable if rewritten in independent form including all of the
4 limitations of the base claim and any intervening claims.

5 Applicant appreciates the finding of allowable subject matter and submits
6 claim 35 has been rewritten in independent form including all of the limitations of
7 the base claim and intervening claims.

1 **Conclusion**

2 The Applicant submits that the claims in this application are now in
3 condition for allowance. Applicant respectfully requests that an early Notice of
4 Allowability be issued. If there are any outstanding issues that would prevent
5 favorable action on this application, Applicant respectfully requests that the
6 undersigned attorney be contacted for the purpose of scheduling an interview.

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9 Respectfully Submitted,

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11 Dated: 10/11/06

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